

Titles of most frequently occurring classifications of patents returned
from a search of 10552824 on Nov 27, 2007

- 13 704/219 (7 OR, 6 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/219 ... Linear prediction
- 9 704/230 (4 OR, 5 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/230 ... Quantization
- 6 704/200.1 (3 OR, 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/200.1 .. Psychoacoustic
- 6 704/226 (0 OR, 6 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/226 ... Noise
- 6 704/223 (3 OR, 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/221 ... Pattern matching vocoders
 704/223 Excitation patterns
- 6 704/207 (1 OR, 5 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/205 ... Frequency
 704/206 Specialized information
 704/207 Pitch
- 6 704/E19.035 (0 OR, 6 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS TECHNIQUES FOR
 REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO
 SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E.G., SOURCE-FILTER
 MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)
 704/E19.023 ... Using predictive techniques; codecs based on source-filter
 modelization (EPO)
 704/E19.026 ... Determination or coding of the excitation function;
 determination or coding of the long-term prediction characteristics (EPO)
 704/E19.035 Determination or coding of a code excitation; code
 excited linear prediction (CELP) vocoders (EPO)
- 5 704/205 (1 OR, 4 XR)

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Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/205 ... Frequency

5 704/222 (1 OR, 4 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/221 ... Pattern matching vocoders
 704/222 Vector quantization

4 704/224 (0 OR, 4 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/224 ... Normalizing

4 704/217 (2 OR, 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/211 ... Time
 704/216 Correlation function
 704/217 Autocorrelation

4 704/220 (0 OR, 4 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/220 ... Analysis by synthesis

3 704/206 (1 OR, 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/205 ... Frequency
 704/206 Specialized information

3 704/E19.019 (0 OR, 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS-SYNTHESIS TECHNIQUES FOR
 REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO
 SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E.G., SOURCE-FILTER
 MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)
 704/E19.01 .. Using spectral analysis, e.g., transform vocoders, subband
 vocoders, perceptual audio coders, psychoacoustically based lossy encoding, etc.,
 e.g., MPEG audio, Dolby AC-3, etc. (EPO)
 704/E19.018 ... Using subband decomposition (EPO)
 704/E19.019 Subband vocoders (EPO)

3 704/258 (1 OR, 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/258 ... Synthesis

- 3 704/227 (0 OR 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/226 ... Noise
 704/227 Pretransmission
- 3 704/E19.003 (0 OR 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS-SYNTHESIS TECHNIQUES FOR
 REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO
 SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E.G., SOURCE-FILTER
 MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)
 704/E19.003 .. Correction of errors induced by the transmission channel,
 if related to the coding (EPO)
- 3 704/E19.032 (0 OR 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS-SYNTHESIS TECHNIQUES FOR
 REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO
 SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E.G., SOURCE-FILTER
 MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)
 704/E19.023 .. Using predictive techniques; codecs based on source-filter
 modelization (EPO)
 704/E19.026 ... Determination or coding of the excitation function;
 determination or coding of the long-term prediction characteristics (EPO)
 704/E19.032 Determination or coding of a multipulse excitation (EPO)
- 3 704/201 (1 OR 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
- 3 375/254 (0 OR 3 XR)
 Class 375 PULSE OR DIGITAL COMMUNICATIONS
 375/242 . PULSE CODE MODULATION
 375/254 ... Noise or distortion reduction
- 3 704/E19.024 (0 OR 3 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS-SYNTHESIS TECHNIQUES FOR
 REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO
 SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E.G., SOURCE-FILTER
 MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)
 704/E19.023 .. Using predictive techniques; codecs based on source-filter
 modelization (EPO)
 704/E19.024 ... Determination or coding of the spectral characteristics,
 e.g., of the short-term prediction coefficients, etc. (EPO)
- 3 375/350 (1 OR 2 XR)
 Class 375 PULSE OR DIGITAL COMMUNICATIONS
 375/316 . RECEIVERS
 375/346 .. Interference or noise reduction
 375/350 ... By filtering (e.g., digital)
- 3 704/221 (1 OR 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING LINGUISTICS,

LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/221 ... Pattern matching vocoders

3 704/262 (0 OR, 3 XR)

CLASS 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/258 .. Synthesis
 704/262 ... Linear prediction

2 704/228 (0 OR, 2 XR)

CLASS 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/226 ... Noise
 704/228 Post-transmission

2 704/501 (0 OR, 2 XR)

CLASS 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/500 . AUDIO SIGNAL BANDWIDTH COMPRESSION OR EXPANSION
 704/501 .. With content reduction encoding

2 341/51 (1 OR, 1 XR)

CLASS 341 CODED DATA GENERATION OR CONVERSION
 341/50 . DIGITAL CODE TO DIGITAL CODE CONVERTERS
 341/51 .. Adaptive coding

2 704/264 (0 OR, 2 XR)

CLASS 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/258 .. Synthesis
 704/264 ... Excitation

2 704/E19.006 (0 OR, 2 XR)

CLASS 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS-SYNTHESIS TECHNIQUES FOR
 REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO
 SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E.G., SOURCE-FILTER
 MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)
 704/E19.006 .. Comfort noise, silence coding (EPO)

2 381/94.1 (0 OR, 2 XR)

CLASS 381 ELECTRICAL AUDIO SIGNAL PROCESSING SYSTEMS AND DEVICES
 381/94.1 . NOISE OR DISTORTION SUPPRESSION

2 704/E21.013 (0 OR, 2 XR)

CLASS 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/E21.001 . MODIFICATION OF AT LEAST ONE CHARACTERISTIC OF SPEECH WAVES
 (EPO)
 704/E21.002 . Speech enhancement, e.g., noise reduction, echo
 cancellation, etc. (EPO)
 704/E21.003 . Applications (EPO)
 704/E21.012 . Separate reconstruction of interference and of speech
 signal (EPO)
 704/E21.013 The interference being a separate speaker (EPO)

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2 704/218 (0 OR, 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/211 ... Time
 704/216 Correlation function
 704/218 Cross-correlation

2 375/245 (1 OR, 1 XR)
 Class 375 PULSE OR DIGITAL COMMUNICATIONS
 375/242 . PULSE CODE MODULATION
 375/244 .. Differential
 375/245 ... Quantizer or inverse quantizer

2 341/143 (0 OR, 2 XR)
 Class 341 CODED DATA GENERATION OR CONVERSION
 341/126 . ANALOG TO OR FROM DIGITAL CONVERSION
 341/143 .. Differential encoder and/or decoder (e.g., delta
 modulation, differential pulse code modulation)

2 704/229 (1 OR, 1 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/229 ... Adaptive bit allocation

2 375/243 (2 OR, 0 XR)
 Class 375 PULSE OR DIGITAL COMMUNICATIONS
 375/242 . PULSE CODE MODULATION
 375/243 .. Correcting or reducing quantizing errors

2 704/203 (1 OR, 1 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/201 .. For storage or transmission
 704/203 ... Transformation

2 704/233 (0 OR, 2 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/231 .. Recognition
 704/233 ... Detect speech in noise

2 375/241 (0 OR, 2 XR)
 Class 375 PULSE OR DIGITAL COMMUNICATIONS
 375/240 . BANDWIDTH REDUCTION OR EXPANSION
 375/241 .. Pulse code modulation

2 704/270 (1 OR, 1 XR)
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION
 704/200 . SPEECH SIGNAL PROCESSING
 704/270 ... Application